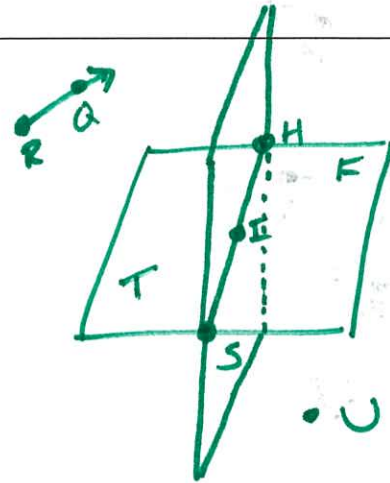


Name: \_\_\_\_\_ TP: \_\_\_\_\_

HW#9: Unit 1 Test Review  
Geometry Due: Tuesday 9/17

1) Draw a figure with the following criteria:

- Plane  $F$
- Lying on Plane  $F$ , line  $SH$
- On Line  $SH$  between Point  $S$  and Point  $H$  there is a Point  $I$
- Point  $T$  that is non-collinear with  $I$ , but coplanar to  $I$
- Point  $U$  that is non-coplanar with points  $H, I$ , and  $T$
- A ray with endpoint  $R$
- Plane  $X$  that intersects Plane  $F$  at line  $SH$



2) Point A is at -1,321 and point b is located at 517.

A: Draw a diagram



B: What is the distance from either endpoint to the midpoint?

$$\frac{-1321 + 517}{2} = \boxed{919}$$

C: What is the distance from Point A to Point B?

$$1838$$

D: What is the midpoint?

$$\frac{-1321 + 517}{2} = -375$$

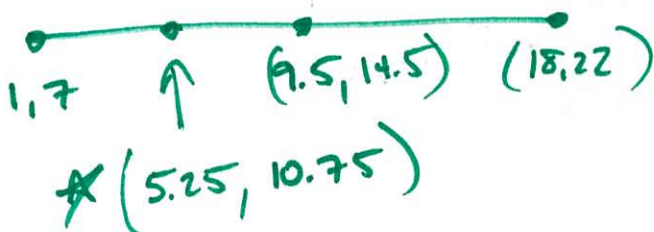
3) What is the midpoint of Line AB is B is at -421 and A is at 32?



$$\frac{-421 + 32}{2}$$

$$\boxed{-194.5}$$

4) Find the point that is one-fourth of the way from (1, 7) to (18, 22).



5)

a. If line  $MNO$  lies on Plane  $T$ , can we also call Plane  $T$  Plane  $MNO$ ?

NO.

Why or why not?

Those 3 points name a plane if collinear or infinite # of planes

Stay Ready.

6. Draw an example of each of the following:

Ray:



Line Segment:



Line:



Plane:



Point:



7) What is the definition of absolute value?

Distance from zero of  
SPECIFIED INTEGER

8) ACT!

The first 5 terms of a geometric sequence are 0.375, -1.5, 6, -24, and 96. What is the 6th term?

- F. -384
- G. -126
- H. -66
- J. 126
- K. 384

0.375, -1.5, 6, -24, 96

$$\begin{array}{r} 96 \\ -4 \\ \hline -384 \end{array}$$

$$96 \cdot -4 = -384$$

9) ACT!

What percent of  $\frac{2}{3}$  is  $\frac{1}{3}$ ?

- F. 22%
- G. 33%
- H. 50%
- J. 67%
- K. 200%

1

10) ACT!

If the following system has a solution, what is the x-coordinate of the solution?

$$\begin{array}{r} 3x + 6y = 52 \\ -x + 6y = 24 \end{array}$$

- F. 19
- G. 14
- H. 6
- J. 0
- K. The system has no solution.

$$\begin{array}{r} 2x = 28 \\ x = 14 \end{array}$$

11) ACT!

A ticket for a movie at the Hazelnut Cinema costs \$5.00. Latoya treats her younger brother to a movie at the Hazelnut Cinema. She gives him  $\frac{1}{2}$  the money she brought with her, for his ticket and a snack. When he asks to play a video game, she gives him \$1.00. That leaves Latoya exactly enough money to buy her own ticket. How much money did Latoya bring with her?

- F. \$10.00
- G. \$11.00
- H. \$12.00
- J. \$13.00
- K. \$14.00

$$\begin{array}{r} 12 \\ 5 + 1 = \end{array}$$

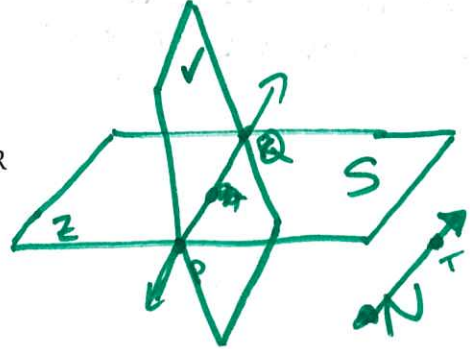
Name: KEY TP: \_\_\_\_\_

CRS	GC: Vocabulary dealing with line segments, planes, lines, rays... GRE504 – Find the midpoint of a line segment
Objectives	<b>Application Objective:</b> 1.6A Find the midpoint of a segment in the coordinate plane using the midpoint formula 1.6B Find the endpoint of a segment given an endpoint and midpoint

SORRY FOR THE ERRORS!

1) Draw a figure with the following criteria:

- Plane Z
- Lying on Plane Z, line PQ
- Point S that is non-collinear with PQ but coplanar to PQR
- Point N that is non-coplanar with PQS
- A ray with endpoint N
- Plane V that intersects Plane Z at line PQR



2) Point A is at -121 and point B is located at 23.

A: Draw a diagram



B: What is the distance from either endpoint to the midpoint?

$$|-121 - 23| = 144$$

C: What is the distance from Point A to Point B?

$$144 / 2 = 72$$

D: What is the midpoint?

$$\frac{-121 + 23}{2} = -49$$

3) With the given endpoints (2,5) and (4,9) and the midpoint being on a perpendicular bisector, what is the equation of the line that goes through the original two points, and what is the equation of the perpendicular line that goes through the midpoint?

$$1) m = \frac{y}{x} = \frac{4}{2} = 2$$

$$y - 5 = 2(x - 2)$$

$$y - 5 = 2x - 4$$

$$y = 2x - 1$$

$$2) \text{ MID PT} = 3, 7$$

$$y - 7 = \frac{1}{2}(x - 3)$$

$$y - 7 = \frac{1}{2}x - 1.5$$

$$y = \frac{1}{2}x + 5.5$$

4) Find the point that is one-fourth of the way from (2, 4) to (10, 8).

1) FIND MIDPOINT

$$6, 6$$

$$2) (4, 5)$$

SAME AS QUIZ, SORRY!

5)


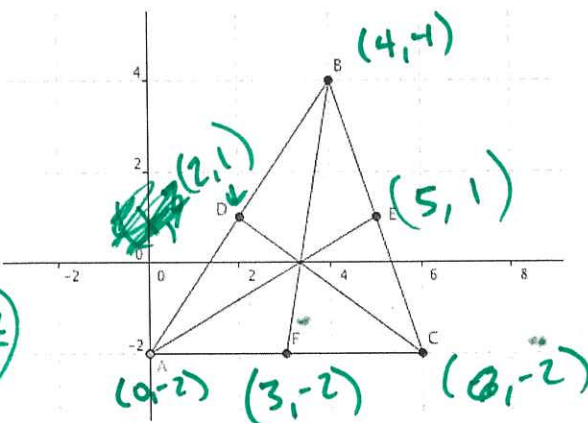
a. If line PQR lies on Plane F, can we also call Plane F Plane PQR?

NO, ONE POINT NEEDS TO BE NON-COLLINEAR

b. How plan planes can you technically label Plane PQR?

INFINITE



<p>6)</p> <p>a. What is the difference between a line, a line segment, and a ray?</p>  <p>b. Draw an example of each.</p> <p>A RAY HAS ONE ENDPONT  A LINE GOES ON FOREVER IN BOTH DIRECTIONS  A SEGMENT HAS TWO EP's</p>	<p>7) For each of the following points, find the distance to the y-axis:</p> <p>(a) (11, 7)      7  (b) (-5, 9)      9  (c) (4, y)      y  (d) (x, -8)      +8 (distance can't be neg)</p>
<p>8) Many things in life involve more than two variables. You and your best friends decide to go on a road trip to California, but before you leave your mom wants to test you on your knowledge of midpoint on a whole new level: using three variables (x, y, z) where x is latitude, y is longitude and z is time. Your mom would like you to find the location and at what time you'll arrive at the middle of your journey given that Chicago is located at <math>34.3^\circ</math> latitude and <math>118.11^\circ</math> longitude and Los Angeles is at <math>41.50^\circ</math> latitude and <math>87.37^\circ</math> longitude and it will take you 42 hours to drive straight there with no stops.</p> $\left( \frac{34.3 + 41.50}{2}, \frac{118.11 + 87.37}{2}, \frac{0 + 42}{2} \right)$ <p>(37.9, 102.74, 21)  lat      long      hrs</p>	<p>9) A median of a triangle is a line segment from one vertex to the midpoint of the opposite side. For example, A is a vertex and AE is the line segment that bisects BC. Find the coordinate of each midpoint created by each median (D, E, and F).</p> 

Pretty sure we won't get here